

PLCS

Tutorial in 30 minutes!
NASA ESA PDE 2009

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What is PLCS ?

ISO 10303-239
Published 2005

Part of STEP

Product Life Cycle Support

Effectively an ISO
standard for

PLM

content

• **eurostep**



INTERNATIONAL STANDARD ISO 10303-239:2005(E)

Industrial automation systems and integration — Product data representation and exchange

Part 239:

Application protocol: Product life cycle support

Systèmes d'automatisation industrielle et intégration — Représentation et échange de données de produits

Partie 239: Protocole d'application: Cycle de vie du produit

ISO/IS 10303-239:2005(E)

First edition 2005-05-01

ICS 25.040.40

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Published in Switzerland

Presentation menu - PLCS



Why?

Who?

Activity

Data

DEXs



The Key Business Problem

How to keep the information needed to operate and maintain a product aligned with the changing product over its life cycle?





Product Life Cycle Support (PLCS)

Membership – Nov 2002



Finnish
Defence
Forces

FMV



FORSVARSDEPARTEMENTET

The Royal Norwegian Ministry of Defence



BAE SYSTEMS



DET NORSKE VERITAS



Rolls-Royce



LSC GROUP



INDUSTRIAL & FINANCIAL SYSTEMS



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OASIS PLCS Technical Committee

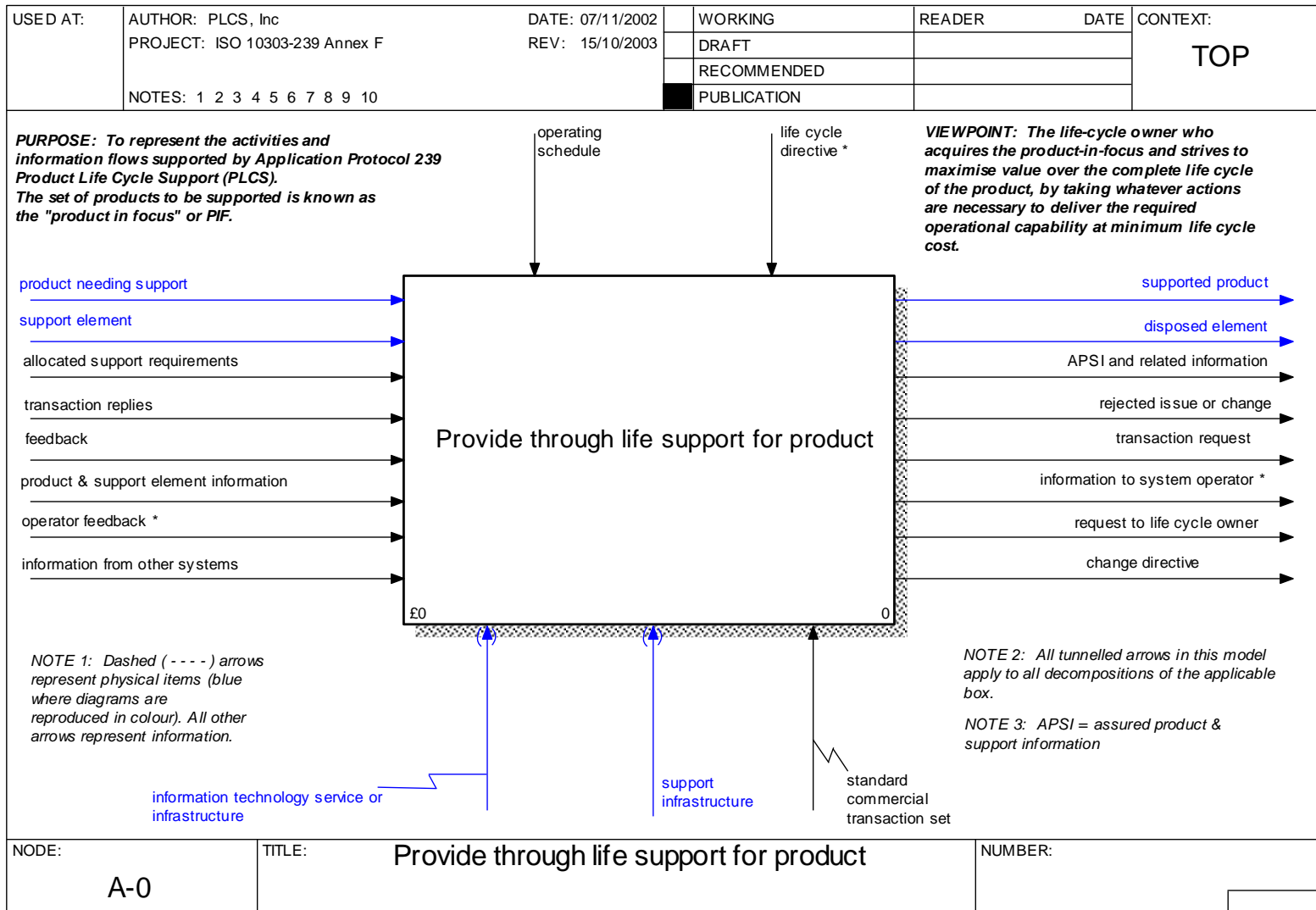
PLCS, Inc. disbanded and handed over to the relevant ISO committee and to the OASIS PLCS Technical Committee

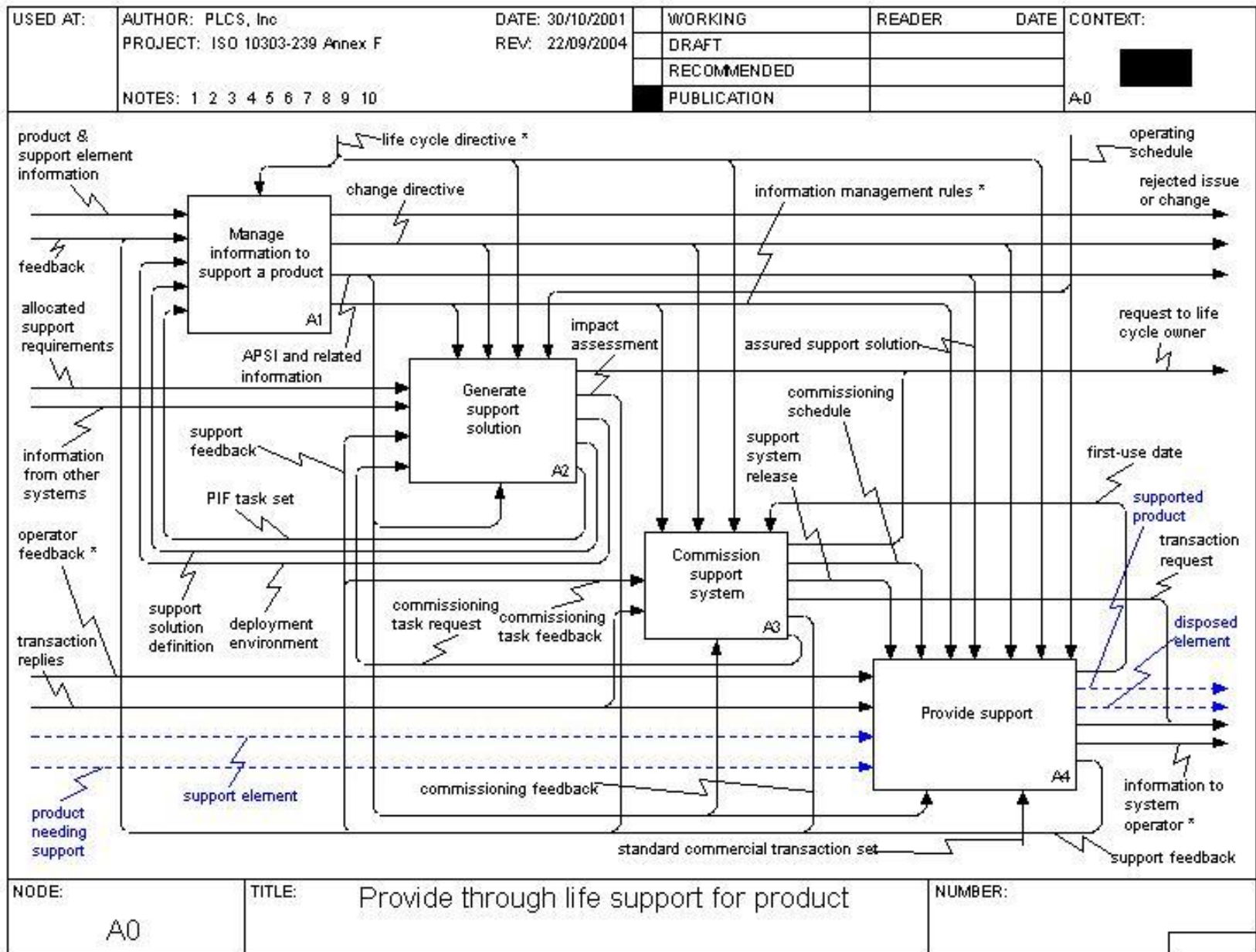
Key priorities identified in the OASIS PLCS TC

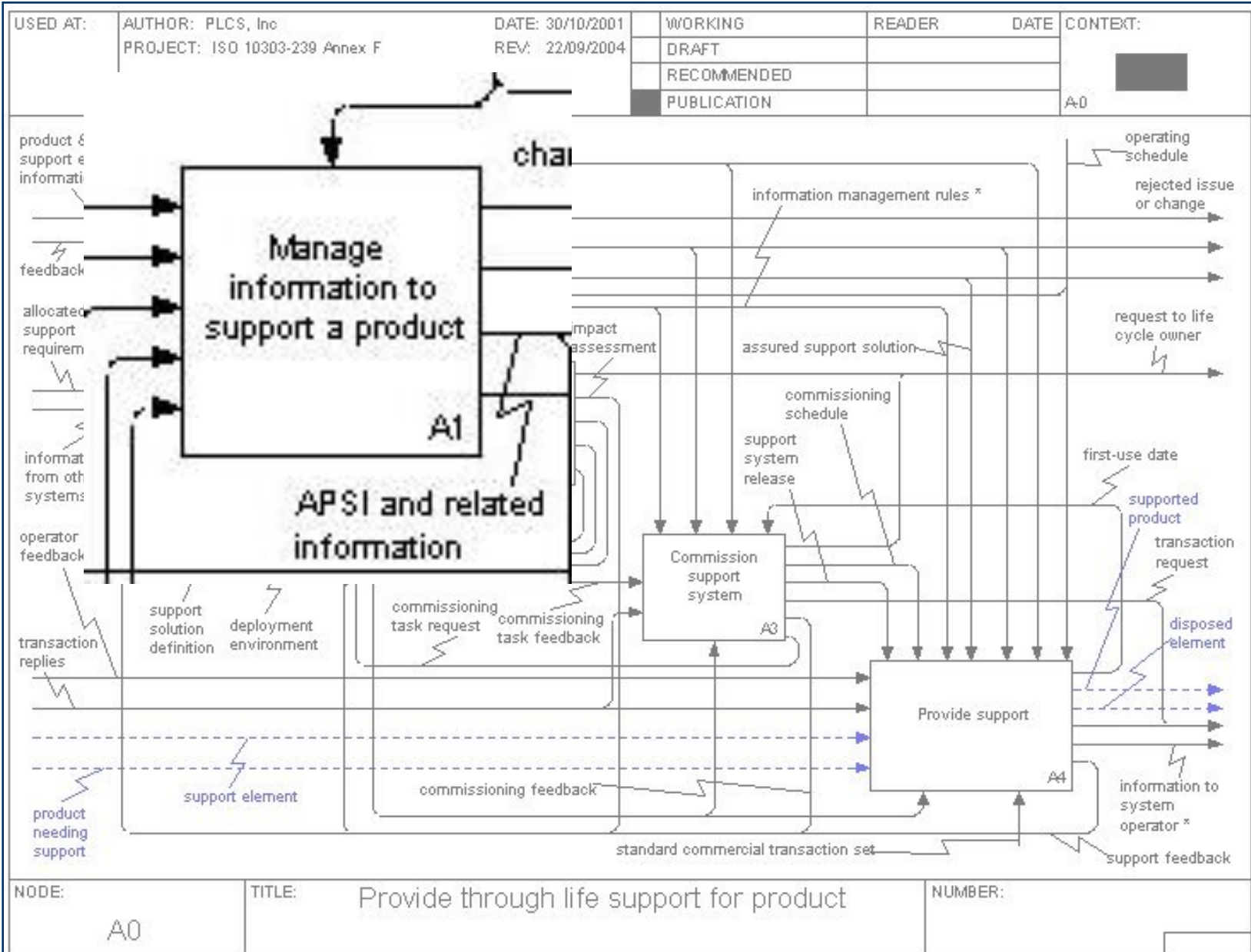
- » DEX publication
 - Aviation maintenance and Task set
- » Further DEX development
 - Support for business DEXs
- » ISO 10303-239 second edition
- » Implementers Forum
- » Web services standardization

THE PLCS ACTIVITY MODEL

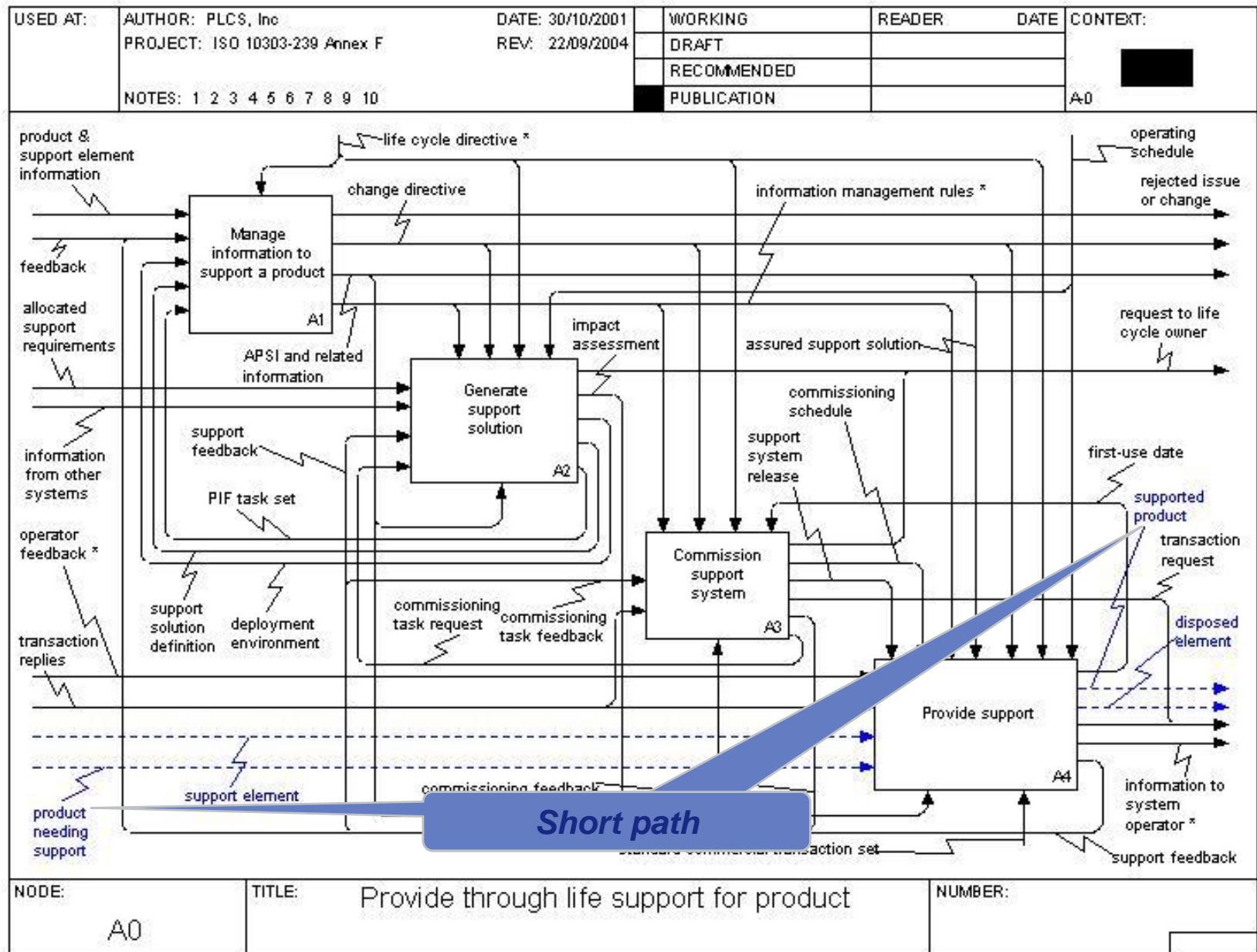
PLCS Activity Model

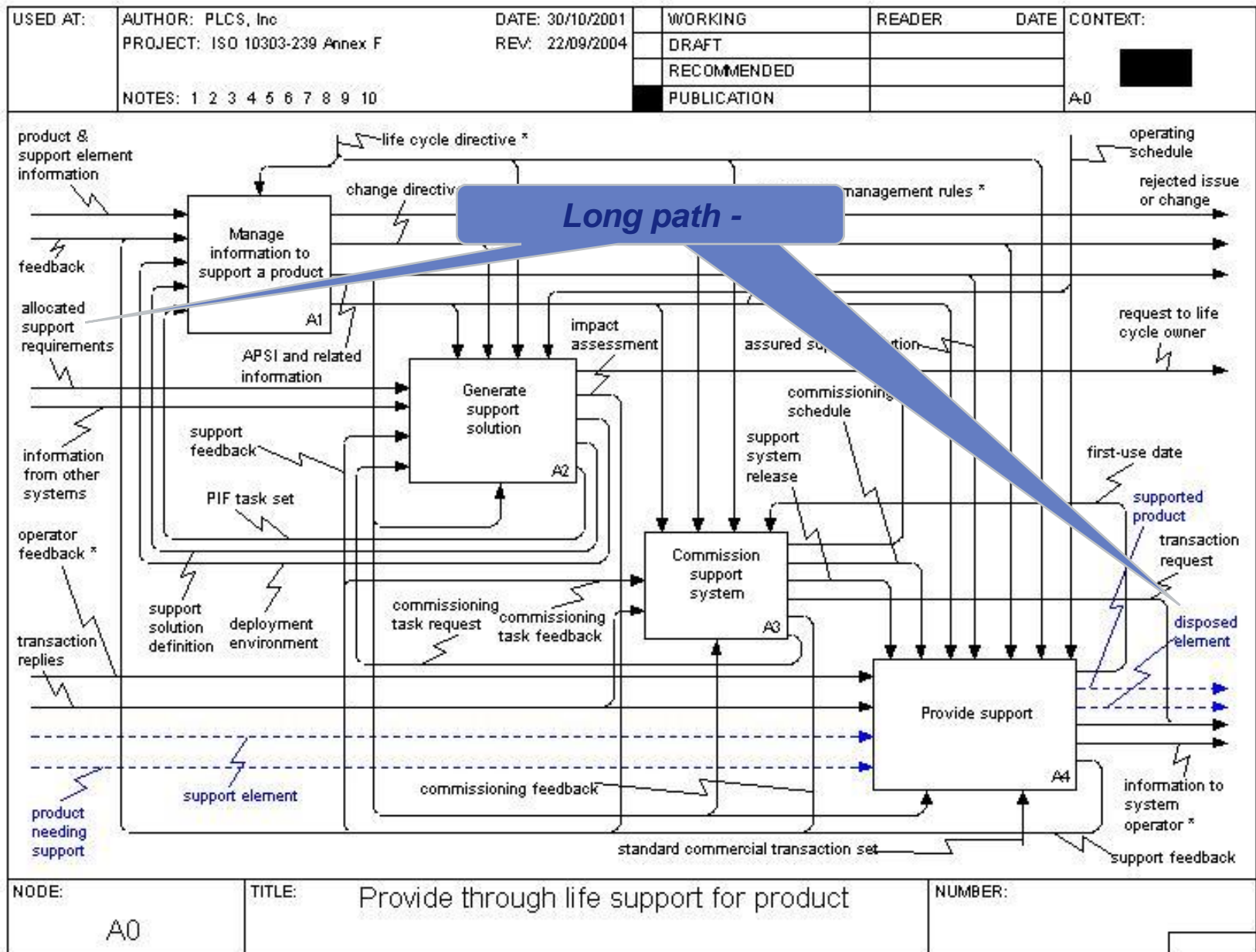






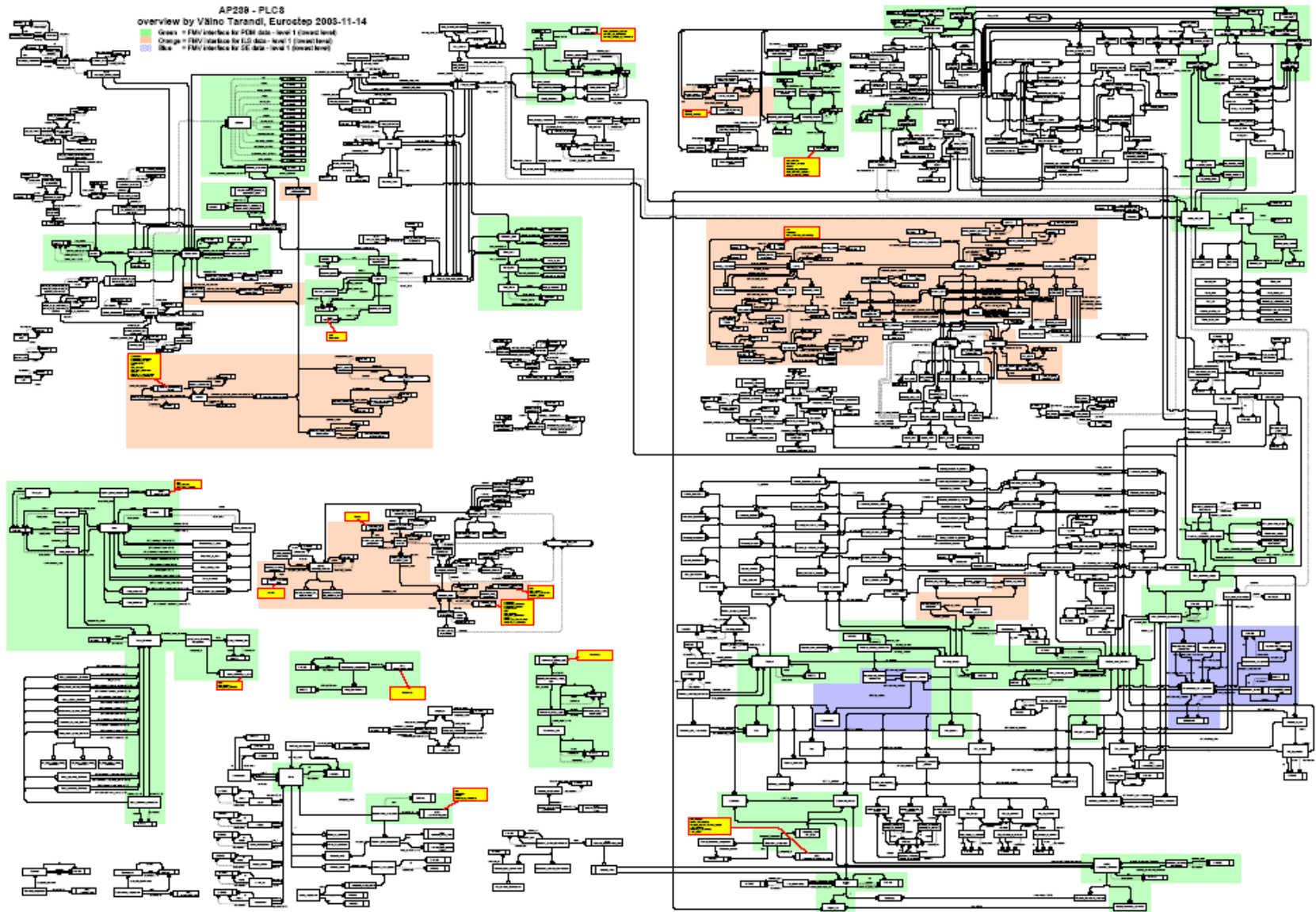
NODE: A0	TITLE: Provide through life support for product	NUMBER:
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THE PLCS DATA MODEL

PLCS Data model



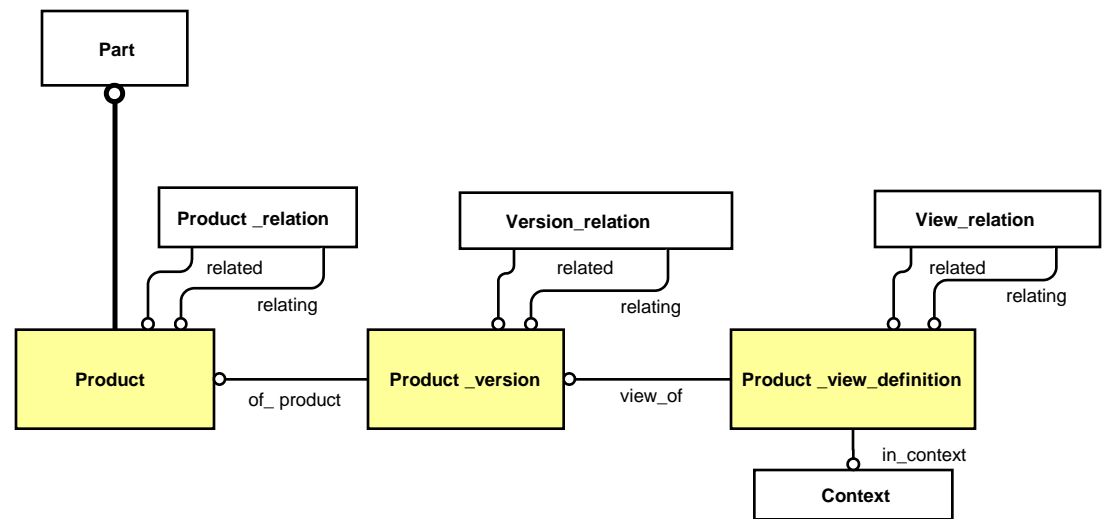
The PLCS Data model

» What follows is a very high level view!

Product

Product structures

Assignments



Property

Representation

Classification

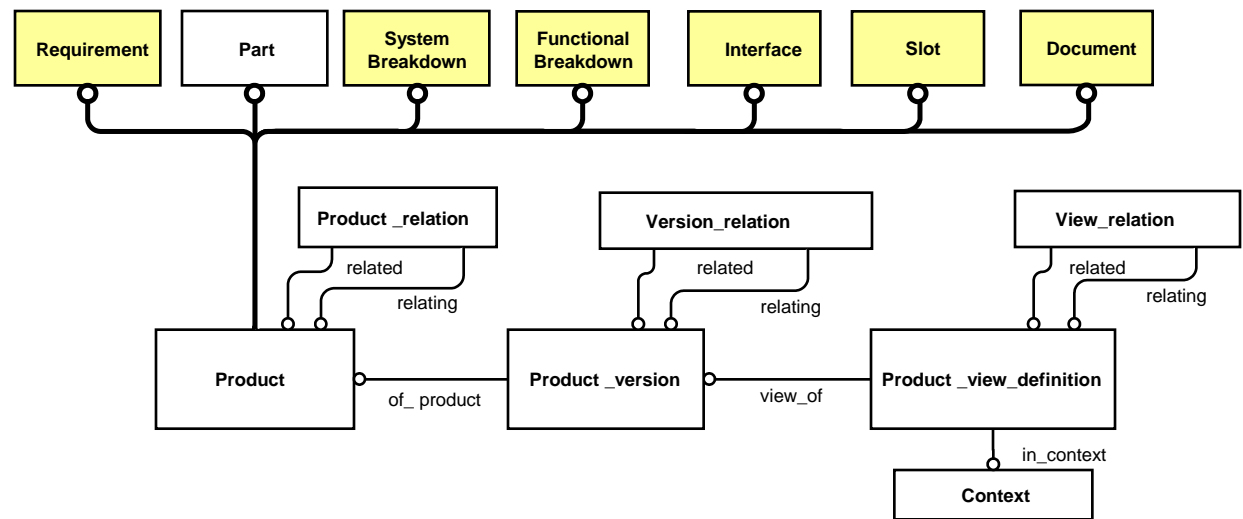
ID_alias

Person_or_
Organization

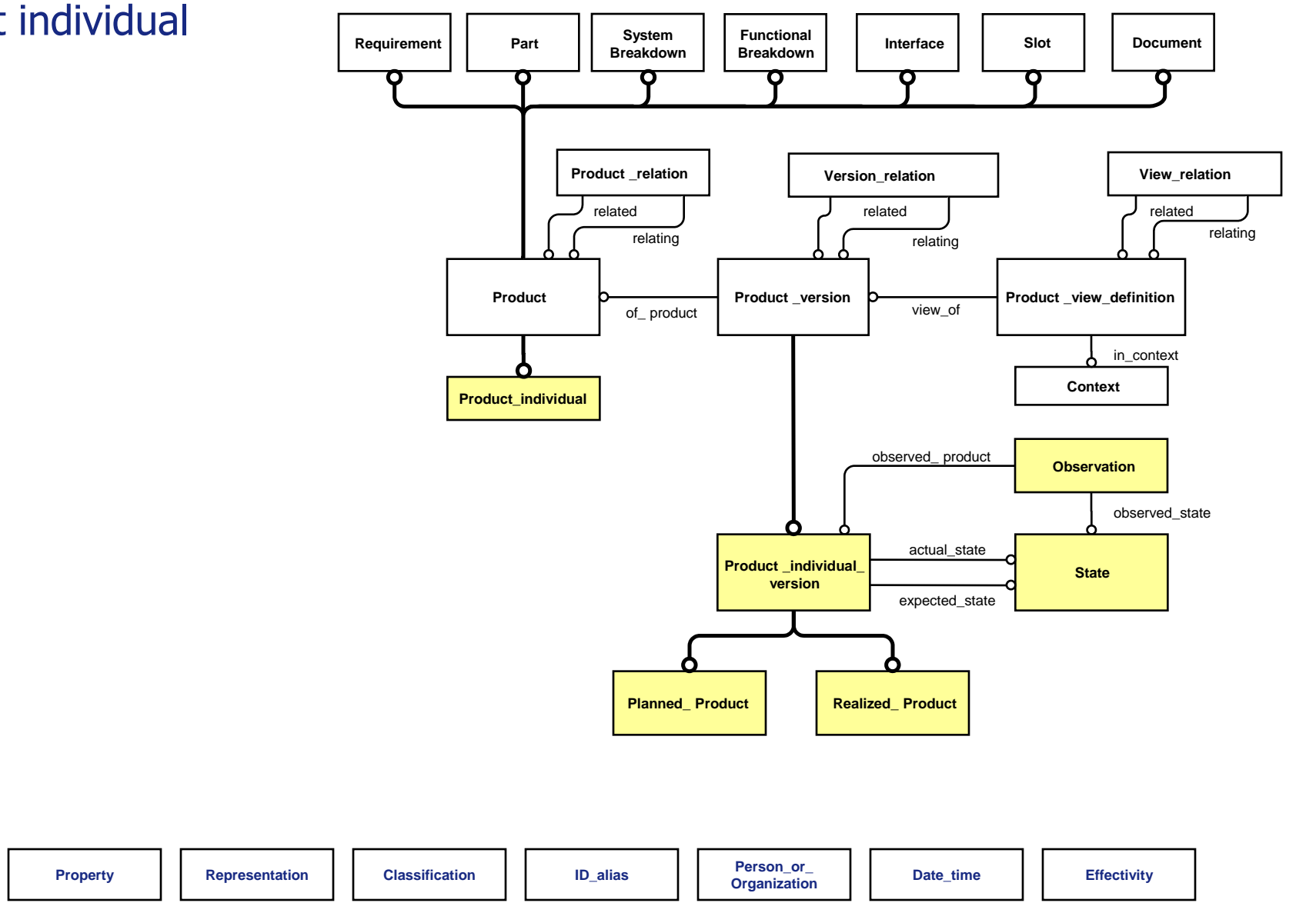
Date_time

Effectivity

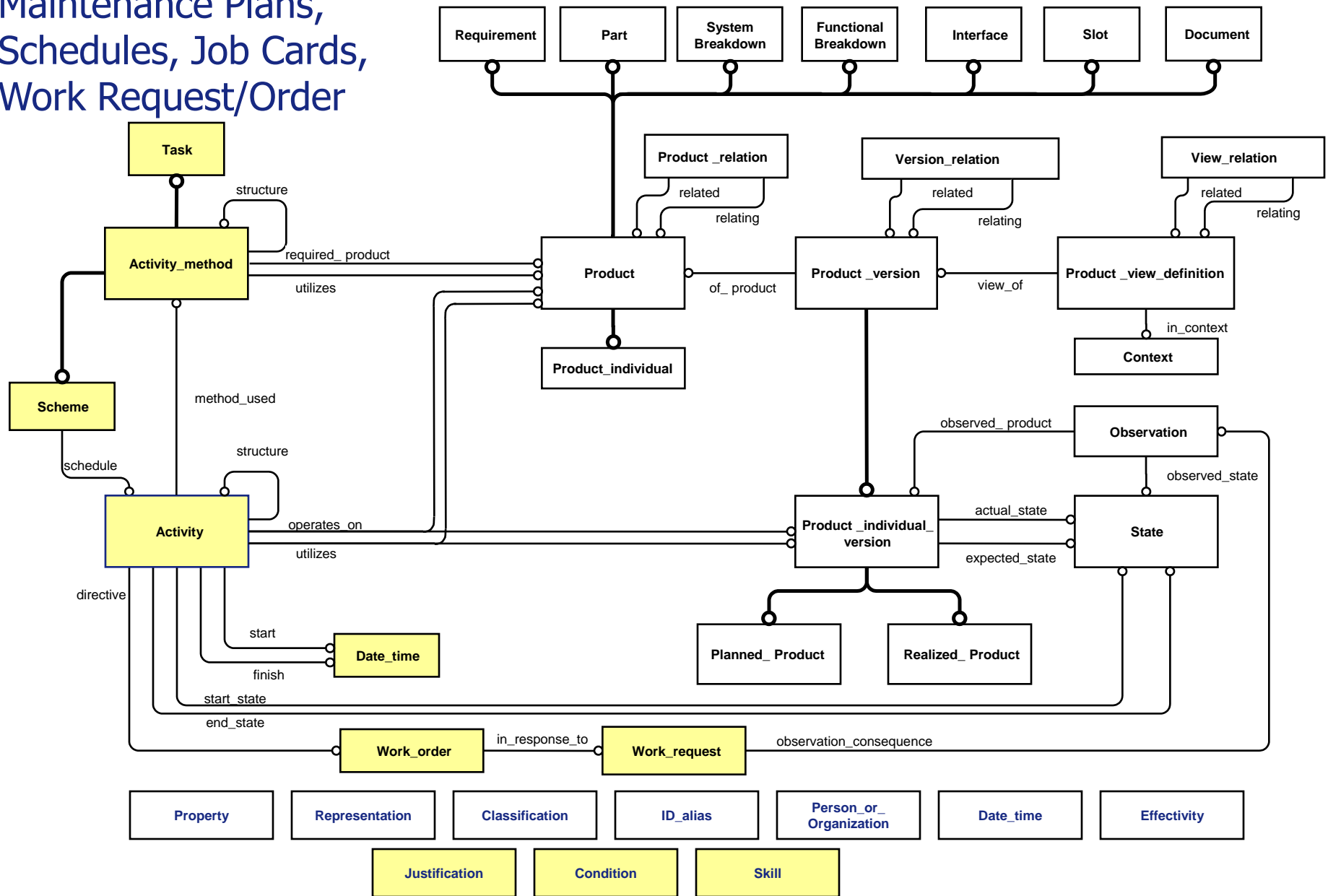
Types of Products



Product individual State

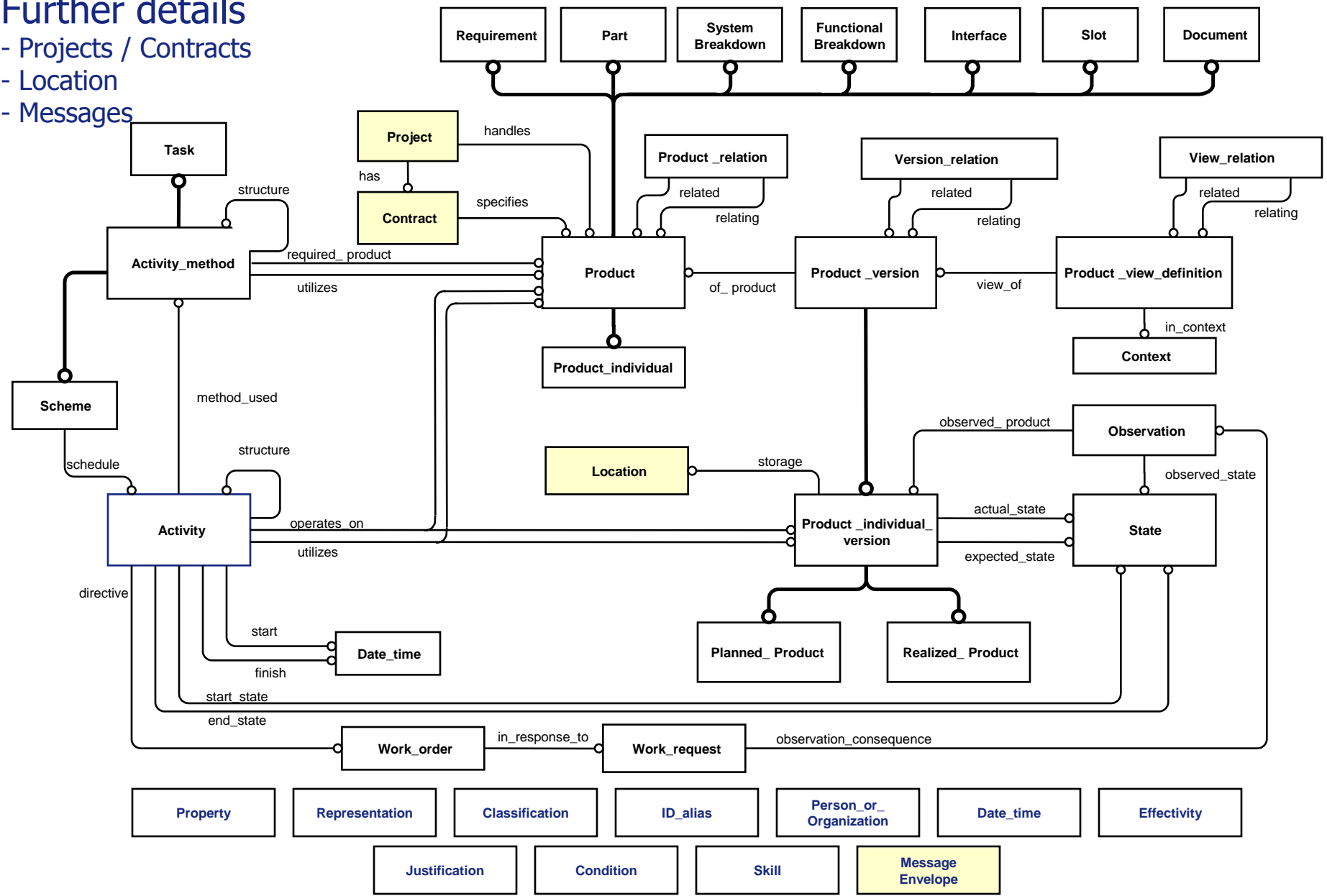


Maintenance Plans, Schedules, Job Cards, Work Request/Order



Further details

- Projects / Contracts
- Location
- Messages



DATA EXCHANGE SPECIFICATIONS

DEXs (Data Exchange Specifications)

- » PLCS has a large scope
- » Need to be able to contract for smaller scopes
 - With more detailed descriptions and guidance
- » Need to (perhaps) be able to claim conformance to a scope
 - Most systems do not cover all the scope
- » Hence Data Exchange Specifications:
 - Some generic
 - e.g. Aviation Maintenance, Task Set
 - Some specific for business
 - LOGSA developed DEXs
 - Norwegian Defence
 - UK MOD
- » All found in DEXlib
 - (see www.plcs-resources.org)

Summary

- » PLCS is an ISO standard designed to handle a rich data set concerned with complex products through life
 - Enable exchange of data between systems and organizations
 - Enable better data (change) management
- » It is not defense specific but was established to meet defense needs
- » It has been designed to be extensible and flexible

More information

» PLCS:

- ISO committee: ISO TC184/SC4
- OASIS committee
 - » http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=plcs
- Community
 - » www.plcs-resources.org
 - Includes links to DEXlib

» Eurostep

- www.eurostep.com

» The presenter

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